



METALS

(Arsenic, Barium, Beryllium, Cadmium, Cobalt, Lead, Mercury, Molybdenum, Platinum, Thallium, Antimony, Selenium, Tungsten, Uranium)

Agent Overview:	Virtually all metals are toxic if they are ingested in large enough quantities. Symptoms of heavy metal toxicity include mental confusion, muscle and joint pain, headaches, short-term memory loss, gastrointestinal upsets, food intolerances/allergies, vision problems, chronic fatigue, and others. Symptoms are so vague that diagnosis is difficult based on symptoms alone. Symptoms usually improve within days or weeks of beginning treatment. While complete cure is possible, toxicity effects may continue for extended periods and the damage may not be fully reversible. Therapy may last from 6 months to 2 years. DPHL can analyze metals in urine, blood and drinking water samples.
Lab Specimen Submittal:	Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.
Type of Specimens Necessary for Testing:	<u>Urine:</u> 25mL-50mL screw-cap container <u>Whole blood:</u> <ul style="list-style-type: none">- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND- Two empty urine cups and two empty blood tubes for each lot # submitted.
Packaging Instructions:	<u>Urine:</u> freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material. <u>Whole blood:</u> place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but <i>must not</i> be frozen. <u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).
Receiving Specimens at DPHL:	Authorized specimens are received at the Lab's rear (loading dock) entrance. Submitters must present ID and complete proper forms.
Handling of Specimens:	Follow chain of custody procedures. Freeze urine specimens.
Reporting Results:	DPHL is a Qualified Trace and Toxic Metals Laboratory. Testing personnel will notify supervisor or Laboratory Director, Deputy Laboratory Director or Chemical Terrorism Coordinator. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.
Contact Information:	Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

Revised: 04/08

Doc. No. 35-05-20/08/04/38